GB

Instruction Manual

Extender & Converter HD/SDI to HDMI

HDA/1002EC

eneo®

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECTS THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION

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RISK OF ELECTRNIC SHOCK
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

EXPLANATION OF GRAPHICAL SYMBOLS

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

PRECAUTIONS

Safety ----------

Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by the qualified personnel before operating it any further.

Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials(curtains, draperies) that may block the ventilation holes.

Height and vertical linearity controls located at the rear panel are for special adjustments by qualified personnel only.

Installation ----------

Do not install the unit in an extremely hot or humid place or in a place subject to excessive dust, mechanical vibration.
The unit is not designed to be waterproof.
Exposure to rain or water may damage the unit.

Cleaning ----------

Clean the unit with a slightly damp soft cloth.
Use a mild household detergent. Never use strong solvents such as thinner or benzene as they might damage the finish of the unit.

Retain the original carton and packing materials for safe transport of this unit in the future.

FCC COMPLIANCE STATEMENT

FCC INFORMATION: THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF THE FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT. THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

THIS CLASS A DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

CET APPAREIL NUMÉRIQUE DE LA CLASSE A EST CONFORME À LA NORME NMB-003 DU CANADA.

CE COMPLIANCE STATEMENT

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been moisture, does not operate normally, or has been dropped.
15. ***CAUTION – THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU QRE QUALIFIED TO DO SO.***
16. ***Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.***

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CONTENTS OF PACKAGE

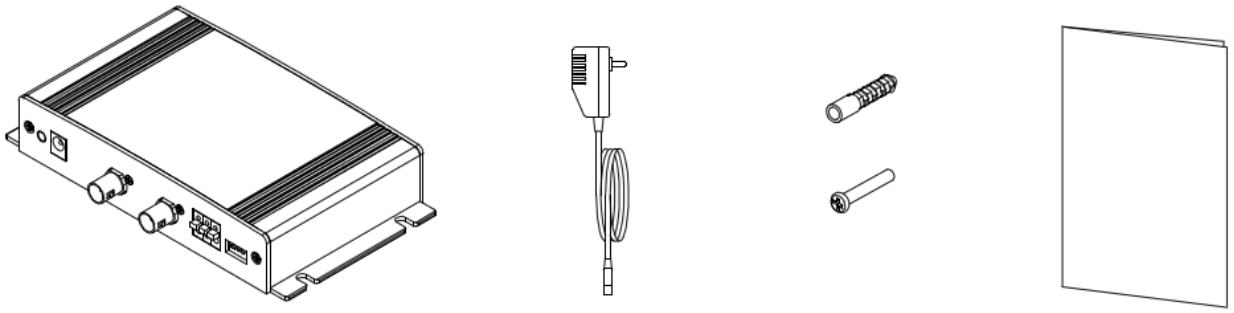
Installation of the camera must be performed by qualified service personnel in accordance with all local and national electrical and mechanical codes.

Carefully remove the color camera and its accessories from the carton and verify that they were not damaged in shipment.

The content of the package includes:

1. HD SDI Converter
2. Adapter
3. Screw (4EA)
4. This manual

COMPONENT



HD SDI CONVERTER **ADAPTER** **SCREW(4EA)** **MANUAL**

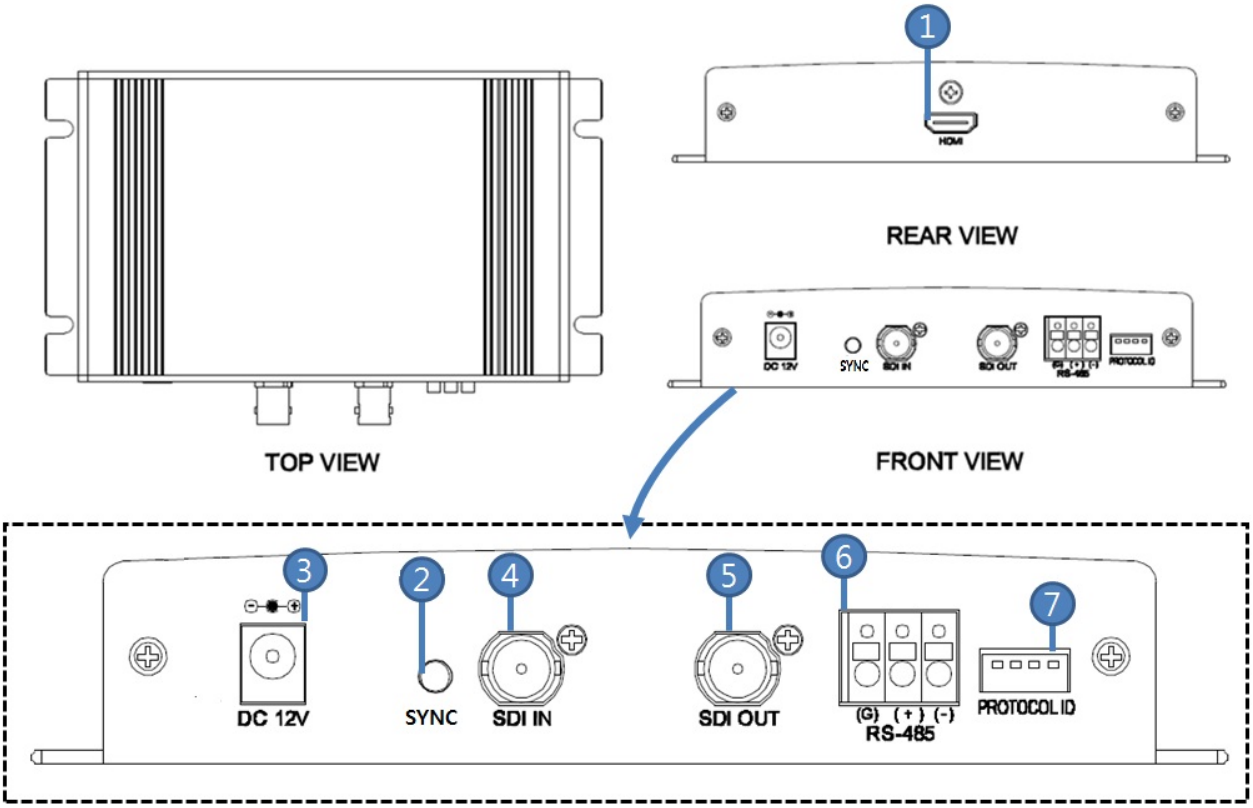
INTRODUCTION

Converter HD-SDI to HDMI in real Time
HD-SDI to HDMI OUT

Features:

- SDI/HD-SDI to HDMI
- SDI/HD-SDI Looping through out
- Supports high definition HD-SDI digital video at 720p50/60, 1080i 50/60, 1080p25//30 formats at all frame rates
- HD-SDI standard SMPTE 292M, 296M at 1,485 Gb/s data rate
- HDMI 1.2 OUTPUT
- RS-485 used Camera Control

CONVERTER OVERVIEW



① HDMI Out

② HD-SDI Signal LED (HD-SDI Signal Detector Light)

③ DC12V IN

④ HD-SDI IN

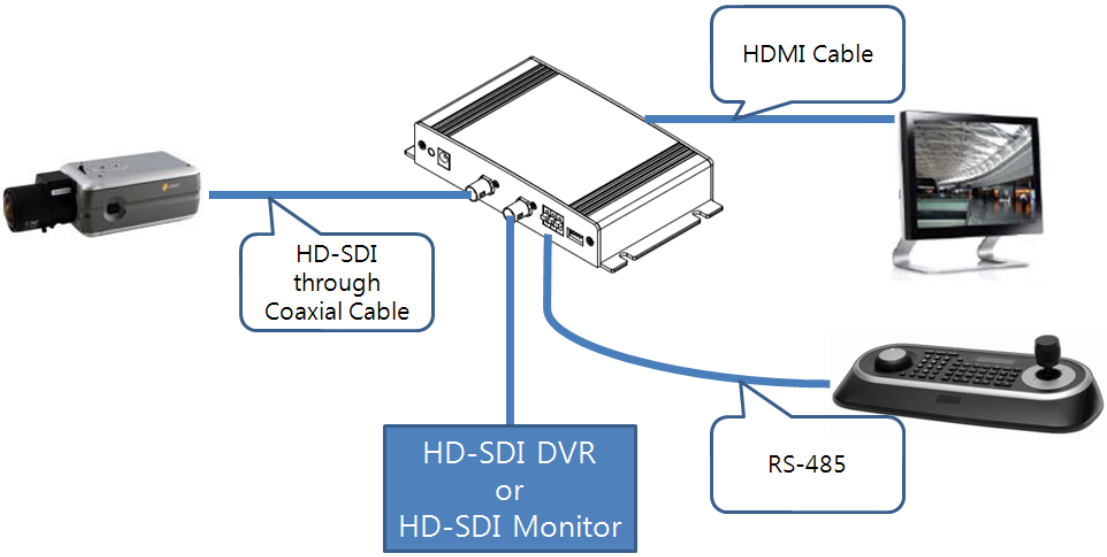
⑤ HD-SDI OUT (HD-SDI IN Looping Through Out)

⑥ RS - 485

⑦ PROTOCOL ID Configuration

CONVERTER INSTALLATION

Connection Overview



Starting Installation

The Converter most be installed by several condition.
- HD-SDI Camera / HDMI Input Monitor or TV / 75Ω BNC & HDMI Cable

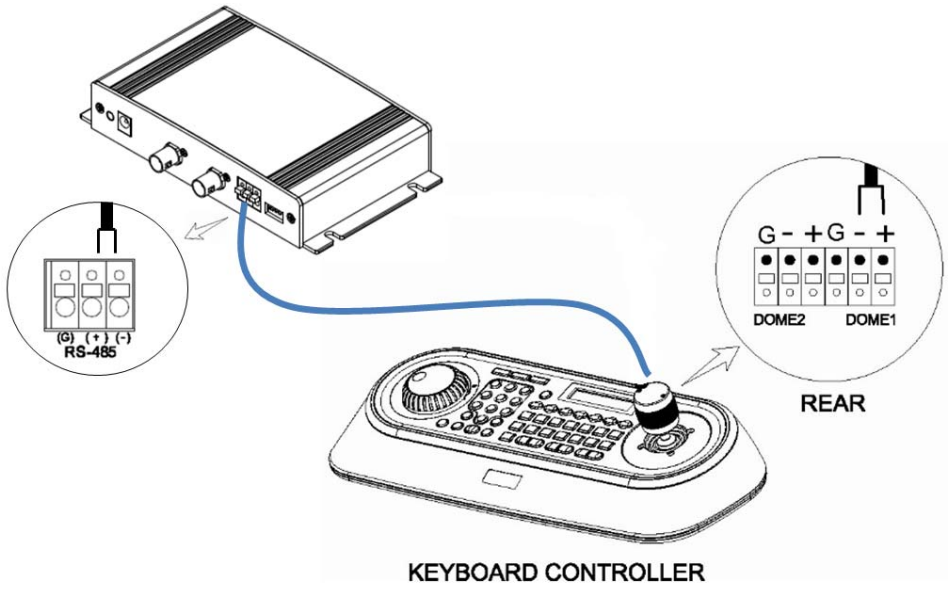
a. Select an appropriate location for the camera.
b. Install camera to be connected (75Ω BNC Cable) to the converter.
c. Install Converter to be connected(HDMI Cable) to the HD Monitor.
d. Plug the dc power into the Converter DC INPUT Jake.
e. The converter LED is lit when the HD-SDI signal is IN
F. The camera viewing area should be displayed on the monitor Screen.

*** NOTES**
- Use Monitor for FULL HD monitor or TV. (1920x1080P 24/25/30 Resolution)
(1920x1080i 50/60 Resolution)

KEYBOARD CONNECTION

RS-485 Connection

XXXX



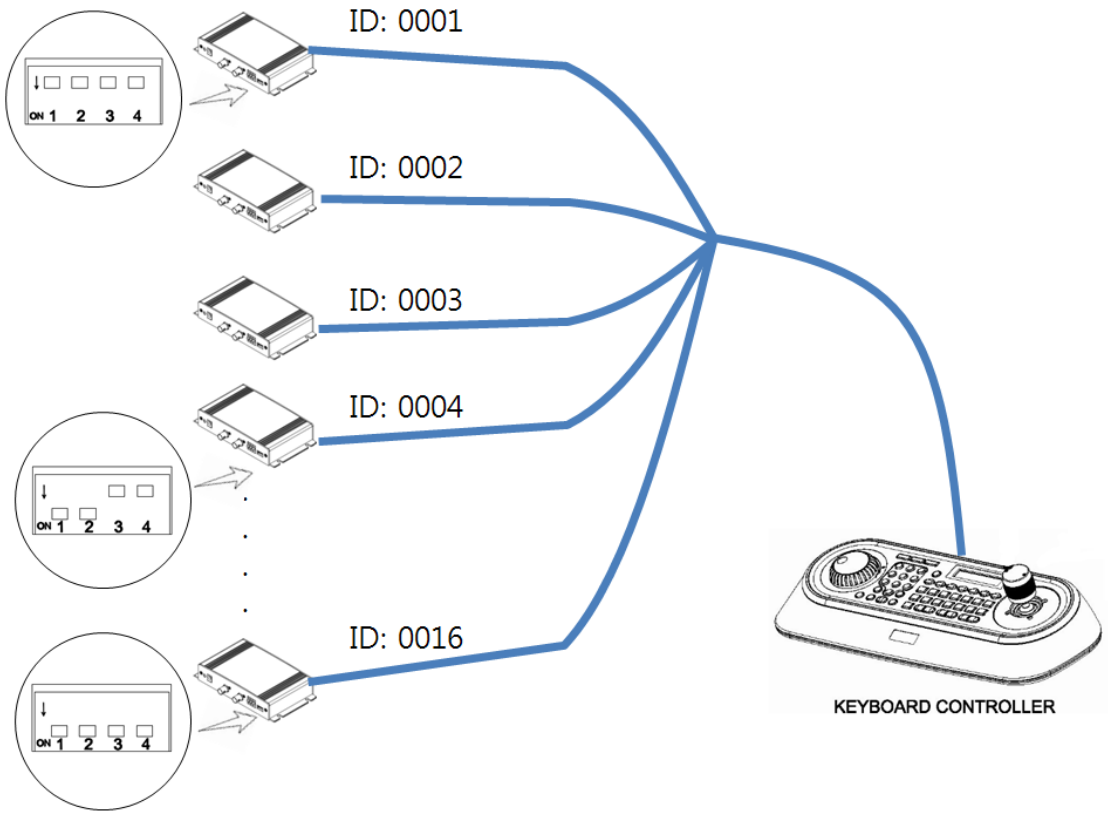
PROTOCOL ID Setting

XXXX

ID	1	2	3	4
0001	Up	Up	Up	Up
0002	Down	Up	Up	Up
0003	Up	Down	Up	Up
0004	Down	Down	Up	Up
0005	Up	Up	Down	Up
0006	Down	Up	Down	Up
0007	Up	Down	Down	Up
0008	Down	Down	Down	Up
0009	Up	Up	Up	Down
0010	Down	Up	Up	Down
0011	Up	Down	Up	Down
0012	Down	Down	Up	Down
0013	Up	Up	Down	Down
0014	Down	Up	Down	Down
0015	Up	Down	Down	Down
0016	Down	Down	Down	Down

Sample: PROTOCOL ID Setting

xxxx



SPECIFICATIONS

Item		HD-SDI to HDMI Converter
Type		**HDA-1002EC**
Art.-No.		**200836**
Input signal	BNC	HD-CCTV /HD-SDI: SMPTE 292M, 296M
Output signal	BNC/HDMI	HD-SDI/HDMI
Input connector	BNC	1 x BNC (HD-SDI) 3G 75Ω inter-locked socket
Output connector	BNC	1 x BNC (HD-SDI) 3G 75Ω inter-locked socket
	HDMI	19 pin HDMI (Digital)
RS-485	Connector	RS-485 interface
	Camera control	Faxtrax, Pelco D, Pelco P
Video	Bandwidth	1,485 Gbps
	Support	HD-CCTV/HD-SDI, format: 720p 50/60 1080p 24/25/30 1080i 50/60
Power	consumption	DC12V 0.25A
Operating Temperature		0°C to + 40℃ (14°F ~ 113°F)
Housing		Metal case
Dimensions	(WxHxD)	166 x 30 x 92.2 mm
Weight		0.6kg

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